

CLAIMS

1. An adhesive composition for semiconductor devices characterized in that it contains at least an epoxy resin, a
5 phenoxy resin and a hardener and a part or all of said epoxy resin contains at least one type of epoxy resin selected from the followings.

(a) a dimer acid modified epoxy resin

(b) a phosphorus containing epoxy resin having an epoxy
10 equivalent of 2000-6000.

2. An adhesive composition for semiconductor devices according to Claim 1, wherein said epoxy resin contains a dimer acid modified epoxy resin (a).
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3. An adhesive composition for semiconductor devices according to Claim 1, wherein said epoxy resin contains phosphorus containing epoxy resin (b) having an epoxy equivalent of 2000-6000.
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4. An adhesive composition for semiconductor devices according to Claim 1, wherein said phenoxy resin at least contains a bisphenol F type phenoxy resin.

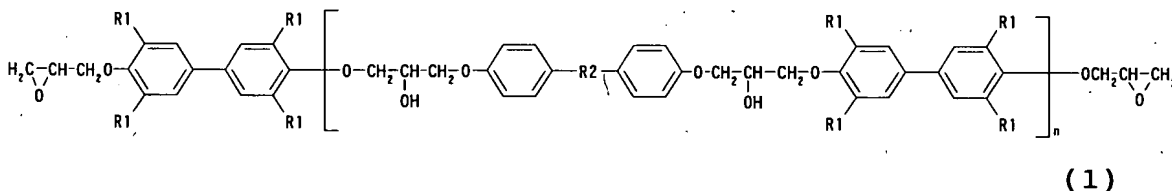
25 5. An adhesive composition for semiconductor devices according to Claim 4, wherein said adhesive composition for semiconductor devices contains, as said phenoxy resin, a bisphenol F type phenoxy resin having a weight average molecular weight of 5×10^4 or more.

30 6. An adhesive composition for semiconductor devices

according to Claim 4, wherein said adhesive composition for semiconductor devices contains, as said phenoxy resin, a bisphenol F type phenoxy resin having an epoxy equivalent of 6000 or more.

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7. An adhesive composition for semiconductor devices according to Claim 4, wherein said adhesive composition for semiconductor devices contains, as said phenoxy resin, a bisphenol F type phenoxy resin represented by the general
10 formula (1).

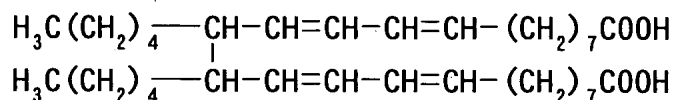
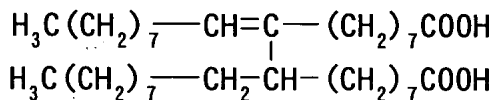
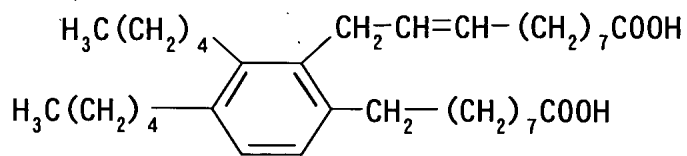


(In the formula, each R1 may be same or different and represents hydrogen or CH₃. Each R2 may be same or different and represents any one of C₆H₁₀, C₈H₈ and C₁₀H₈.)

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8. An adhesive composition for semiconductor devices according to Claim 1, wherein said dimer acid modified epoxy resin contains at least one dimer acid selected from the following compounds.

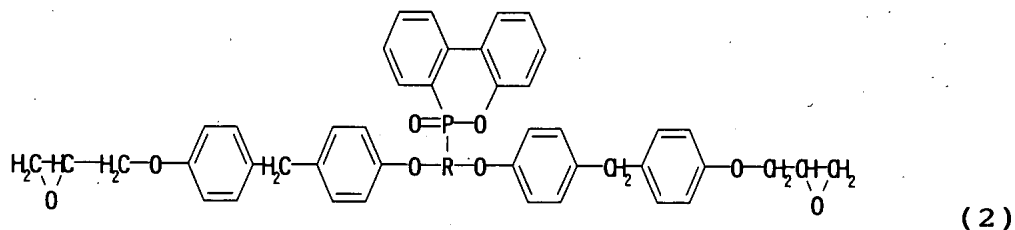
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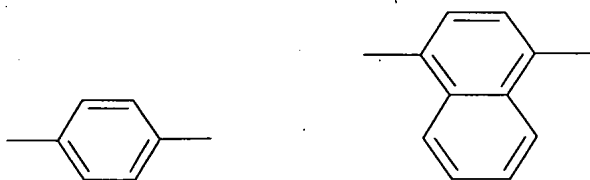
9. An adhesive composition for semiconductor devices according to any one of Claims 1 to 3, wherein said adhesive composition for semiconductor devices contains, as said phenoxy resin, a brominated phenoxy resin.

10. An adhesive composition for semiconductor devices according to any one of Claims 1 to 3, wherein said hardener is dicyandiamide.

11. An adhesive composition for semiconductor devices according to Claim 3, wherein said phosphorus containing epoxy resin is a resin represented by the general formula (2).



(In the formula, R is selected from hydrogen atom, an alkyl group with 1 to 12 carbons and the following structures.)



12. An adhesive composition for semiconductor devices according to any one of Claims 1 to 3, further containing an
5 imidazole silane.

13. An adhesive composition for semiconductor devices according to Claim 1 or Claim 11, wherein said phenoxy resin is a bisphenol A type phenoxy resin.

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14. An adhesive sheet for semiconductor devices, wherein it is an adhesive sheet containing at least one organic insulation film and an adhesive layer disposed thereon, and said adhesive layer contains adhesive composition for semiconductor devices
15 described in any one of Claims 1 to 13.

15. A cover lay film, wherein it is a cover lay film containing at least one organic insulation film, an adhesive layer disposed thereon and a protective film disposed on the adhesive layer
20 wherein said adhesive layer contains the adhesive composition described in any one of Claims 1 to 13.

16. A copper-clad film, wherein it is a copper-clad film containing at least one organic insulation film, an adhesive layer disposed on said film and a copper foil disposed on the
25 adhesive layer, wherein said adhesive layer contains the adhesive composition described in any one of Claims 1 to 13.

17. A copper-clad film according to Claim 16, wherein it further contains an adhesive layer disposed on the opposite surface of said organic insulation film and a copper foil disposed on the adhesive layer.

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18. A copper-clad film according to Claims 16 or 17, wherein said organic insulation film is a polyimide film.